



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,699	05/23/2001	Tatsuhiko Ibuki	Q64565	9797

7590 07/29/2005
SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

SON, LINH L D

ART UNIT PAPER NUMBER

2135

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,699

Applicant(s)

IBUKI, TATSUHIRO

Examiner

Linh LD Son

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is a Non-Final action in response to the amendment dated 04/20/05.
2. Claims 1-28 are pending.

Response to Arguments

3. Applicant's arguments, see Amendment, filed 04/20/05, with respect to the rejection(s) of claim(s) 1-28 under U.S.C 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Walker and Yu. See rejection below.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

Art Unit: 2135

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 9-11, 15-18, and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Walker et al, US Patent 6163771, hereinafter "Walker".

6. As per claims 1, 9, and 15, Walker discloses "a user authentication device to which a user information processor and an authentication information processor are connected over a communication network" in (Col 2 lines 30-35), wherein said user information processor comprises: a function unit for sending a first authentication number to said authentication information processor" in (Col 8 lines 9-35); and "a function unit for converting the first authentication number to a second authentication number using a predetermined conversion rule in response to an access permission notification from said authentication information processor and for using the second authentication number as a new first authentication number" in (Col 8 lines 9-35), and "wherein said authentication information processor comprises: a function unit for making a check using a database in response to the first authentication number from said user information processor" in (Col 8 lines 40-55); "a function unit for sending the access permission notification to said user information processor if a user is authenticated as valid as a result of the check" in (Col 8 line 55 to Col 9 line 3); and "a function unit for converting the first authentication number to a second authentication number using the same conversion rule after sending the access permission notification and for recording the second authentication number into the database as a new first authentication

number" in (Col 8 lines 40-55).

7. As per claims 2, and 16-18, Walker discloses "the user authentication device as defined by claims 1 and 15, wherein said user information processor comprises: a portable recording medium" in (Col 5 lines 50-55); "a function unit for reading a first authentication number and a predetermined conversion rule from said portable recording medium and for sending the first authentication number to said authentication information processor; and a function unit for converting the first authentication number to a second authentication number using the conversion rule in response to the access permission notification and for recording the second authentication number on said portable recording medium as a new first authentication number" in (Col 8 lines 9-35).

8. As per claims 3-4, Walker discloses "the user authentication device as defined by claim 1, wherein said user information processor comprises: a portable recording medium" in (Col 5 lines 50-55); "and a function unit for reading a first authentication number from said portable recording medium and for sending the first authentication number to said authentication information processor, and wherein said portable recording medium comprises a function unit for converting the first authentication number to a second authentication number using a predetermined conversion rule in response to the access permission notification and for recording the second authentication number on said portable recording medium as a new first authentication number" in (Col 8 lines 9-35).

9. As per claims 9 and 23, Walker discloses "a transaction system using the user authentication device as defined by claims 2 and 16, wherein said user information processor sends the first authentication number and an accounts-settlement request to said authentication information processor, wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet" in (Col 2 lines 30-35, and Col 8 lines 40-55), "said user information processor is a terminal in a retail store, said authentication information processor is a credit card company terminal, said portable recording medium is a credit card" in (Col 5 lines 50-65, and Col 6 lines 35-38), and said authentication number is a credit card number" in (Col 8 lines 20-30).

10. As per claims 10 and 24, Walker discloses "a transaction system using the user authentication device as defined by claims 3 and 17, wherein said user information processor sends the first authentication number and an accounts-settlement request to said authentication information processor, wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet" in (Col 2 lines 30-35, and Col 8 lines 40-55), "said user information processor is a terminal in a retail store, said authentication information processor is a credit card company terminal" in (Col 5 lines 50-65, and Col 6 lines 35-38), said portable recording medium is a credit card, and said authentication number is a credit card number " in (Col 8 lines 20-30).

11. As per claims 11 and 25, Walker discloses "a transaction system using the user authentication device as defined by claims 4 and 18, wherein said user information processor sends the first authentication number and an accounts-settlement request to said authentication information processor" in (Col 2 lines 30-35, and Col 8 lines 40-55), "wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet, said user information processor is a terminal in a retail store, said authentication information processor is a banking terminal, said portable recording medium is a cash card" in (Col 5 lines 50-65, and Col 6 lines 35-38), "and said authentication number is a personal identification number" in (Col 8 lines 20-30).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5-8, 12-14, 19-22, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker, in view of Yu et al, US Patent No. 6067621, hereinafter "Yu".

14. As per claims 5-8 and 19-22, Walker discloses "a user authentication device to which a user information processor, a mediator information processor, and an authentication information processor are connected over a communication network" in (Col 2 lines 30-35), "wherein said user information processor comprises: a function unit for sending a first authentication number to said mediator information processor" in (Col 5 lines 50-55, and Col 8 lines 9-35); "and a function unit for converting a second authentication number to a third authentication number using a predetermined conversion rule in response to the second authentication number from said mediator information processor and for using the third authentication number as a new first authentication number", "wherein said mediator information processor comprises: a function unit for sending the first authentication number to said authentication information processor, said first authentication number being received from said user information processor" in (Col 6 lines 8-14); and "a function unit for receiving the second authentication number from said authentication information processor and for sending the second authentication number to said user information processor", and "wherein said authentication information processor comprises: a function unit for making a check using a database in response to the first authentication number from said mediator information processor and for sending the second authentication number to said mediator information processor if a user is authenticated as valid as a result of the check" in (Col 8 lines 55-60), "the second authentication number being different from the first authentication number"; and "a function unit for converting the second authentication number to a third authentication number using the same conversion rule and for

Art Unit: 2135

recording the third authentication number into the database as a new first authentication number" in (Col 8 lines 20-35).

However, Walker does not teach the limitations underlined above.

Nevertheless, Yu does disclose the "User Authentication System for Authenticating an authorized user of an IC Card" invention, which includes a method of transmitting an authentication number to a party for authentication from the user terminal (Col 6 line 47 to Col 7 line 20). After a successful verification by the party (Col 7 lines 28-67), a synchronization password (digits) is sent out to the user terminal for counter extraction to get synchronized (Col 8 lines 50-67).

However, Yu does not disclose the mediator processor to transfer the second authentication number from the user terminal to the authentication server and back to the user. Nevertheless, Walker does disclose this scenario (Figure 3A).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify and incorporate Yu's invention with Walker's invention so that the synchronization password will deliver the correct counter value for the next account generation. The synchronization password does provide strong security to protect the synchronization counter value.

15. As per claims 12-14 and 26-28, Walker discloses "a transaction system using the user authentication device as defined by claims 6-8, and 20-22, wherein said mediator information processor sends the first authentication number and an accounts-settlement request to said authentication information processor, wherein said authentication

Art Unit: 2135

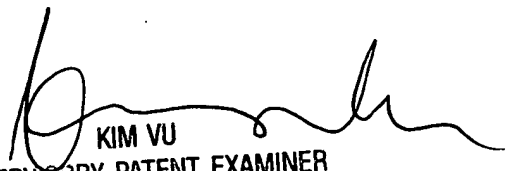
information processor executes the check and account-settlement processing, and wherein said communication network is the Internet" in (Col 2 lines 30-35, and Col 8 lines 40-55), "said user information processor is a user terminal, said mediator information processor is a sales center terminal, said authentication information processor is a credit card company terminal, said portable recording medium is a credit card" in (Col 5 lines 50-65, and Col 6 lines 35-38), "and said authentication number is a credit card number" in (Col 8 lines 20-30).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh LD Son whose telephone number is 571-272-3856. The examiner can normally be reached on 9-6 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100